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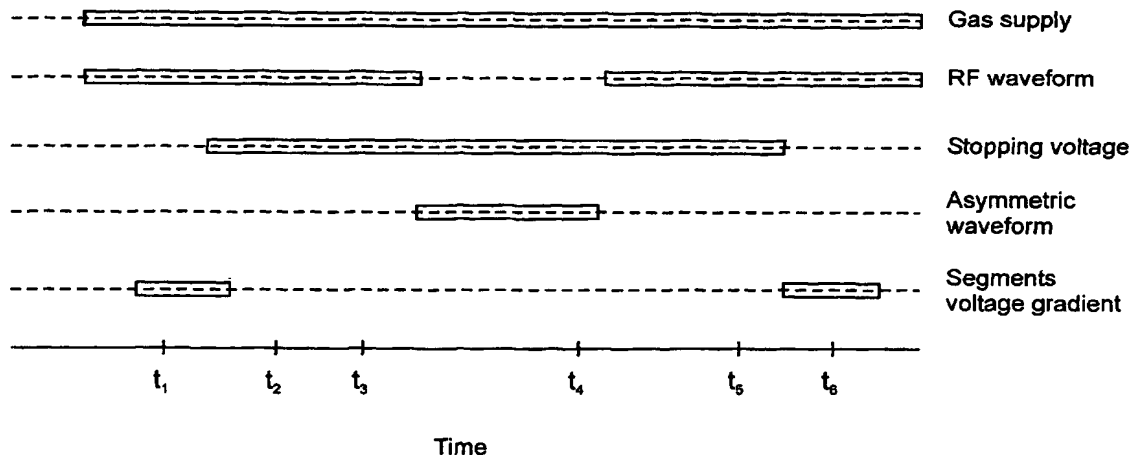
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(54) Title: METHOD AND QUADRUPOLE APPARATUS FOR SEPARATING IONS IN THE GAS-PHASE



(57) Abstract: Disclosed is a high field asymmetric waveform ion mobility spectrometer (FAIMS) including a set of spaced-apart parallel rods, the space between the parallel rods having first and second ends and defining an analyzer region. The apparatus includes an electrical controller for electrically coupling to the set of parallel rods, for applying at least an rf-voltage between the parallel rods of the set of parallel rods in a first operating mode and for applying a combination of an asymmetric waveform voltage and a direct current voltage between the parallel rods of the set of parallel rods in a second operating mode.

WO 2004/030129 A2



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